

ABSTRACT

A method of the gasification of coal using oxygen and steam is provided wherein the coal is gasified at a temperature of from 1000 to 2500 °C and a pressure of from 1 to 100 kg/cm² using oxygen generated
5 by electrolyzing water and steam having a temperature of from 300 to 600 °C attained by heat exchange heat with a high temperature gas generated by the coal gasification. In the method, a remarkably higher efficiency and low carbon dioxide emission is attained.